## MEDICAL LABORATORY TECHNICIAN

A student who has completed the Job Corps Medical Laboratory Technician program is equipped with the skills to contribute to the workplace as a valued employee from day one. Competence in academic and vocational skills is required for graduation. In addition, Job Corps students learn employability and technological skills. To complete his or her Medical Laboratory Technician training, a student must master skills in these categories:

## **PROGRAM CORE REQUIREMENTS**

Explain the medical ethics that a Medical Lab Technician must know; demonstrate proper use of the following: laboratory safety, laboratory glassware; receive certification in CPR; explain the topic of urinalysis as it relates to clinical microbiology; demonstrate in the laboratory, correct procedures performed for a urinalysis and hematology; explain how the following items relate to a Medical Laboratory Technician: immunology, serology, blood banking; explain the chemical analysis of serology; identify and demonstrate proper use of all medical laboratory equipment; define photometry, biostatistics, quality control.

## **DUTIES AND TASKS**

Explain the difference between manual and automated tests in the medical chemistry lab; explain the conditions for obtaining abnormal results and radioisotope diagnostic testing; define and explain the following terms as it relates to Medical Laboratory Technician: mycology, parasitology, virology; define and identify the following functions: hepatic, renal, thyroid, enzymes, electrolytes, endocrine hormones; describe and identify isolation of pathogenic bacteria; discuss and identify isolation of pathogenic bacteria's sensitivities to antibiotics; define the following terms as they relate to blood cells: cell and platelet counts, hemoglobin and hematocrit determination, automated methods, differential blood smears; discuss the difference between normal and abnormal hematology; discuss the study of serological diagnosis of disease to include: syphilis, blood groups of man, antigen-antibody reactions regarding the cross-match; define the following as it relates to the medical laboratory: blood bank, clinical chemistry, hematology, microbiology, serology/immunology, urinalysis; complete a research paper on a specific area of the medical laboratory area; demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals and with the public; collect and process biological specimens for analysis; perform analytical tests on: body fluid, cells, products; satisfactorily perform in a laboratory, tests on the following: hematology, chemistry, microbiology, immunology, serology, urinalysis, blood banking; perform preventive and corrective maintenance of equipment and instruments.

## **SPECIFIC COURSE ELECTIVES**

Discuss the elements of general, organic and biological chemistry which are essential to the allied health professions; use medical terminology, abbreviations, dictionary and procedures manual; discuss the following: principles of electrical circuits, applied optics, atomic and nuclear radiation; explain how the scientific method is applied to the study of human behavior; discuss the following and how it relates to the study of human behavior: structure and function of nervous system, foundations of learning, intelligence, social behavior, personality, feeling and emotion and the measurement of behavior; complete laboratory investigations on the following: nature of blood, urine, hormones, enzymes of digestion, blood pressure and heart action, cells, muscle, respiratory, reproductive.